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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/873,848	06/04/2001	Michael P. Reynolds	0031-UP	4839

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EXAMINER
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ARNOLD JR, JAMES

ART UNIT	PAPER NUMBER
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1764

DATE MAILED: 04/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/873,848

**Applicant(s)**

REYNOLDS, MICHAEL P.

**Examiner**

James Arnold, Jr.

**Art Unit**

1764

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 21-23 is/are pending in the application.
- 4a) Of the above claim(s) 8-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 21-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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## **DETAILED ACTION**

### ***Response to Amendment***

The 35 USC 112 rejections have been overcome.

### ***Election/Restrictions***

Applicant's election with traverse of claims 1-7 in the paper filed January 2, 2004 is acknowledged. The traversal is on the ground(s) that in searching a process for the hydrogenation and/or dehalogenation of a polyalphaolefin by hydrogenating and/or dehalogenating at least one polymerized alpha olefin under catalytic hydrogenation and/or dehalogenation conditions in the presence of hydrogen and a catalytically effective amount of a substantially amorphous hydrogenation/dehalogenation catalyst one would necessarily find art related to a process employing these components and a substantially hydrogenated and/or substantially dehalogenated polyalphaolefin homo or copolymer, obtained from a process employing the components. This is not found persuasive because what is required for a valid restriction between a process of making and a product made is either that the process as claimed can be made used to make other and materially different product or that the product as claimed can be made by another and materially different process. In the instant case, the product can be produced by a materially different process such as a process involving the use of a different catalyst in the form of a Ziegler-Natta catalyst.

The requirement is still deemed proper and is therefore made FINAL.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-7 and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Degnan (USPN 5,573,657).

The Degnan reference discloses that it is well known that hydrogenation is conventionally carried out in the presence of a catalyst usually comprising a metal hydrogenation component on a porous support material. See column 1, lines 19-25. Suitable metals include nickel, palladium, platinum, rhodium, and/or iridium. See column 1, lines 25-28. Suitable supports include silica-alumina (amorphous). See Column 1, line 27. The reference further teaches a specific alpha olefin feed in the form of 1-decene (which is between 2 and 20 carbon atoms) See column 1, lines 53-54.

The reference does not disclose a metal component in the amount of about 0.01 to about 5 weight percent based on the total weight of the catalyst; or a catalyst with a particle size distribution having particles greater than about 250 microns and particles less than about 75 microns.

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It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize a metal component in the amount of about 0.01 to about 5 weight percent based on the total weight of the catalyst; and a catalyst with a particle size distribution having particles greater than about 250 microns and particles less than about 75 microns because the catalytic components are disclosed by the reference and it would be appropriate to adjust the weight of the metal component and the particle size of the catalyst to enhance its effectiveness.

### ***Response to Arguments***

Applicant's arguments have been fully considered but are deemed unpersuasive. Applicant argues that Degnan doesn't disclose or suggest a metal component in the amount of about 0.01 to about 5 weight percent based on the total weight of the catalyst; however, because the catalytic components are disclosed by the reference, it would be appropriate to adjust the weight of the metal component of the catalyst to enhance its effectiveness. Therefore the Examiner contends that applicant's disclosure would be obvious to one having ordinary skill in the art at the time the invention was made.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Arnold, Jr. whose telephone number is 571-272-1443. The examiner can normally be reached on Monday-Thursday 8:30 AM-6:00 PM; Fridays from 8:30 AM-5:00 PM with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 571-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ja  
April 2, 2004

  
**Walter D. Griffin**  
**Primary Examiner**